

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,905	10/04/2000	Nils Lindskog	1318	4042
:	7590 09/17/2002			
Alfred J Mangels			EXAMINER	
4729 Cornell Road Cincinnati, OH 45241-2433			COLAIANNI, MICHAEL	
			ART UNIT	PAPER NUMBER
			1731	
			DATE MAILED: 09/17/2002	}

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. 09/601,905

Applicant(s)

Lindskog et al.

Examiner

Michael Colaianni

Art Unit 1731



	The MAILING DATE of this communication appears	on the cover sheet with the correspondence address			
	or Reply				
THE !	ORTENED STATUTORY PERIOD FOR REPLY IS SET MAILING DATE OF THIS COMMUNICATION.				
	ions of time may be available under the provisions of 37 CFR 1.136 (a). In a date of this communication.	no event, however, may a reply be timely filed after SIX (6) MONTHS from the			
	eriod for reply specified above is less than thirty (30) days, a reply within the period for reply is specified above, the maximum statutory period will apply a				
- Failure	to reply within the set or extended period for reply will, by statute, cause th	e application to become ABANDONED (35 U.S.C. § 133).			
•	ply received by the Office later than three months after the mailing date of the patent term adjustment. See 37 CFR 1.704(b).	nis communication, even if timely filed, may reduce any			
Status					
1) 💢	Responsive to communication(s) filed on Oct 4, 20				
2a) 🗌	This action is <b>FINAL</b> . 2b) 💢 This action	ion is non-final.			
3) 🗆	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.				
Disposi	tion of Claims				
4) 💢	Claim(s) 1-11	is/are pending in the application.			
4	a) Of the above, claim(s)	is/are withdrawn from consideration.			
5) 🗆	Claim(s)	is/are allowed.			
6) 💢	Claim(s) 1-11	is/are rejected.			
7) 🗆	Claim(s)	is/are objected to.			
8) 🗆	Claims	are subject to restriction and/or election requirement.			
Applica	tion Papers				
9) 🗆	The specification is objected to by the Examiner.				
10)💢	The drawing(s) filed on Oct 4, 2000 is/are	a) $\square$ accepted or b) $\boxtimes$ objected to by the Examiner.			
	Applicant may not request that any objection to the d	rawing(s) be held in abeyance. See 37 CFR 1.85(a).			
11)💢	The proposed drawing correction filed on <u>Oct 4, 2000</u> is: a) $\square$ approved b) $\square$ disapproved by the Examiner				
	If approved, corrected drawings are required in reply t	to this Office action.			
12)	The oath or declaration is objected to by the Exami	ner.			
Priority	under 35 U.S.C. §§ 119 and 120				
13) 💢 Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
<b>a</b> ) [	☐ All b)☐ Some* c)☑ None of:				
	1. $\square$ Certified copies of the priority documents hav	e been received.			
	2. $\square$ Certified copies of the priority documents hav	e been received in Application No			
	3. \(\overline{\times}\) Copies of the certified copies of the priority deapplication from the International Bure				
<b>*</b> S	ee the attached detailed Office action for a list of th				
14)	Acknowledgement is made of a claim for domestic	priority under 35 U.S.C. § 119(e).			
a)   The translation of the foreign language provisional application has been received.					
15)	Acknowledgement is made of a claim for domestic	priority under 35 U.S.C. §§ 120 and/or 121.			
Attachm	ent(s)	_			
1) 💢 N	otice of References Cited (PTO-892)	4) Interview Summary (PTO-413) Paper No(s).			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)					
3) 🗶 In	3) X Information Disclosure Statement(s) (PTO-1449) Paper No(s)				

Application/Control Number: 09/601905

Art Unit: 1731

### **Drawings**

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the the "spiral elements carried in ceramic tubes" as claimed in claims 4 and 9 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "band-shaped resistor heating elements" as claimed in claims 5 and 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Page 3

Application/Control Number: 09/601905

Art Unit: 1731

#### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Penberthy 3326655 in view of Blumenfeld 4655812.

Penberthy teaches all that is claimed in claims 1, 2, 3, 6, 7, 8 and 11 (col. 2, lines 45-51; col. 1, lines 44-46; col. 2, lines 15-20; col. 3, lines 21-55; Fig. 2; Fig. 1 the length is at least twice the width of the conditioning channel); except placing heating elements in the roof of the conditioning channel; the electric heating elements being spirals in ceramic tubes; or band shaped heating elements mounted on the outside of the ceramic.

Application/Control Number: 09/601905

Art Unit: 1731

However, Blumenfeld teaches that it is known to place electric heating element in the roof of a forehearth (Fig. 2, ref. no. 60, 66). Moreover, Blumenfeld teaches that the heating element may be in spiral form mounted in ceramic tubes (Fig. 6, ref. no. 62 (the ceramic part) and 60 (the spiral shaped element, see also Fig. 7 (the electrode is spiral shaped)). Moreover, Blumenfeld may be construed to teach a band-shaped resistor element mounted on an outersurface of the ceramic material (Fig. 6, ref. no. 62 (the ceramic part) and 60 (the band-shaped element, see also Fig. 7 (the elongated shape may be construed as being "band-shaped")).

It would have been prima facie obvious at the time the invention was made to combine Blumenfeld's teachings with Penberthy's method and apparatus of conditioning glass because Penberthy teaches that a "heat cocoon" is to be formed in the channel and thus includes heating from above and below the glass (col. 1, lines 70-72, col. 2, lines 1-23). Thus, forming a "heat cocoon" would obviously include heating using a roof-mounted heater because providing such a heater would complete the "heat cocoon" desirably taught by Penberthy.

#### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Colaianni whose telephone number is 703-305-5493. The examiner can normally be reached on Monday to Friday from 8:00 AM to 4:30 PM.

Art Unit: 1731

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin, can be reached on (703) 308-1164. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

MICHAEL COLAIANNI

Art Unit 1731 September 16, 2002